

Inside Wallops

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NASA Rockets Launched from Alaska Range

A series of four NASA Terrier-Orion sounding rockets were launched during a three hour span from the Poker Flat Research Range, Alaska on February 18.

Each of the 35 foot, two stage rockets released trimethyl aluminum (TMA) to create a glowing vapor trail nearly 87 miles up into the night sky. The launches at 12:59 a.m., 1:29 a.m., 1:59 a.m., and 2:49 a.m. Alaska Standard Time left a whitish trail, some resembling corkscrews in the sky, were visible in many part of interior and northern Alaska.



Photo by Lee Wingfield

"There were four trails on the up-leg (of the rocket trajectory), four on the down-leg," said Dr. Gerald Lehmacher of Clemson University, principal investigator for the experiment. "The instruments worked well."

"They pretty much filled up a big part of the sky," Lehmacher said.

The harmless vapor trails of the first rocket dissipated in about 20 minutes, after which Lehmacher and the launch crew sent following rockets into the same portion of the sky, which was clear with a faint arc of the aurora to the north. Researchers at ground stations in Fort Yukon, Coldfoot and Toolik Lake used sensitive cameras to capture images of the trails for later analyses.

With the four launches, Lehmacher will analyze upper-atmospheric winds by observing how the vapor trails formed, how they billowed and how they dispersed. Two of the rockets also carried instruments to measure electron density, neutral temperature, and turbulence.

"We want to measure the region where turbulence reaches its largest values and then stops acting," Lehmacher said.

One launch remains in the 2009 Winter Campaign from Poker Flat Research Range. The launch window ends March 3.

Dr. Kristina Lynch, assistant professor of physics and astronomy at Dartmouth College, Hanover, N.H., is the principal investigator for the Cascades 2 experiment. A 58-foot, four-stage Black Brant XII sounding rocket will be launched into an active aurora display when the weather is

clear above Chatanika and at camera sites in Toolik Lake and Kaktovik, on Alaska's north slope.

Libby West, NASA Sounding Rockets Program Office, is the campaign manager. Rick Weaver, NASA Sounding Rocket Operations Contract (NSROC), was the mission manager for Dr. Lehmacher's mission.

Wallops Shorts.....

On the Road

Henry Cathey, New Mexico State University's Physical Science Laboratory, spoke to all four fifth grade classes at Highland Springs Elementary School near Richmond, Va, on February 12. His presentation was on the NASA Balloon Program, and careers in science, mathematics, and engineering.

Jack Vieira, NASA Range and Mission Management Office, participated in a Career Day event at Pocomoke (Maryland) High School on February 12.

7 MCF Test Flight from Antarctica

The 7 million cubic foot super pressure balloon test flight ended at 3:59:16 Z on February 20, after 54 days, 1 hour, 29 minutes — A new heavy load duration record.

In the Field

NASA's P-3 aircraft and crew have left Wallops for Goose Bay, Canada. They will be supporting the Jet Propulsion Laboratory's High Winds mission through March 8.

The P-3B High-Winds science mission is to study wind patterns and ocean salinity to the north of the Grand Banks located southeast of Newfoundland on the continental shelf.

The flights will test and validate algorithms aboard NASA's QuickSCAT, ocean surface wind-measurement satellite.

Two additional radars on the P-3 aircraft include a radar system that is currently in the QuickSCAT satellite, used to measure ocean surface wind fields, and a new prototype radar system that will measure ocean salinity. The sensor will be launched on NASA's Aquarius satellite in 2010.

"Be a good listener.
Your ears will never
get you in trouble,"
.....Frank Tyger



NSROC Co-ops Assist Local Teams



Photo courtesy of Jan Jackson

NASA Sounding Rocket Operations Contract (NSROC) co-ops (pictured) are preparing the Eastern Shore Robotics Build for the FIRST Robotics Competition in March. The students have worked two hours daily for over three weeks assisting local high school participants from Accomack County, Salisbury and Berlin, MD.

Left to right: Adam Hunter, West Virginia University; Trevor Sheerin, University of Texas/Dallas; Johnna Esposito, Virginia Tech; and Eric Root, Penn State University.

Mardi Gras
February 24
5 p.m. at the Rocket Club

Karaoke
Free Food
Drink Specials

Sponsored by the Wallops Exchange and Morale Association, Morale Activities Committee. For further information contact Claudia Underwood at x1414.

Did you know.....

In the Wallops Aerobics Club group exercise programs, participants help motivate each other and help keep the workout fun.

FOR RENT

House on Chincoteague, four bedrooms, one bath, large back yard, screened front porch, spacious kitchen, washer/dryer. Call (757) 990-0860 for more information.

One Man's Journey Through Black History

You are invited to join the NASA and Navy Diversity Councils in a celebration of Black History Month at 11:30 a.m., February 25 in the Williamsburg Room, Bldg. E-2.

Dr. Joel Freeman, a well-known speaker on the topic of Black History, will present the significant accomplishments of African descendants since the dawn of civilization, expose racist distortions and cover-ups of those achievements and offer a process for individual healing, hoping and cross-cultural understanding. He also will have a number of historical artifacts on display.

Dr. Freeman has been a featured speaker at Blacks In Government, NASA, Department of Justice, NIH, Verizon, and many other organizations around the world. His book, "Return to Glory" has been endorsed by notables like Steve Forbes, Bill Cosby, Julius (Dr. J) Erving, Ben Carson, Joe Frazier and Dr. Billy Graham.

NASA Day at Maryland Capitol

On Thursday, February 12, Rebecca Powell, Wallops Public Affairs Office, joined other Goddard employees in presenting an exciting day of interactive exhibits and presentations at the Presidential Conference Center, East Miller Senate Office Building, in Annapolis, MD.

Also recognizing Goddard's 50 year anniversary, the day was an excellent opportunity for Maryland House and Senate members to gain a better understanding of Goddard's impact within the state, the Nation, and our global community.

USPS I ncreases Price of Postage Stamps

The United States Postal Service will increase the rate for a 1-ounce first-class mail stamp from 42¢ to 44¢ on May 11, 2009. The cost for standard mail, periodicals, package services (including parcel post), and extra services also will increase. There will be no changes in the current additional ounce price for first-class mail, which remains at 17 cents.

Customers can purchase Forever Stamps at 42¢ prior to May 11 and continue to use them to mail 1-ounce letters after the price change without adding additional postage.



Stock up on Forever Stamps at the Wallops Post Office from 11:00 a.m. until 3:30 p.m. Our full-service post office carries retail products including commemorative stamps, photos, and prints. Post office box rentals are available. Call x1243 for more information.

Prices for most shipping services, including express mail and priority mail, were adjusted in January of this year and will not change in May.

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